User Connection Concepts

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Dispersed
Steerable & Shapeable Cvgs

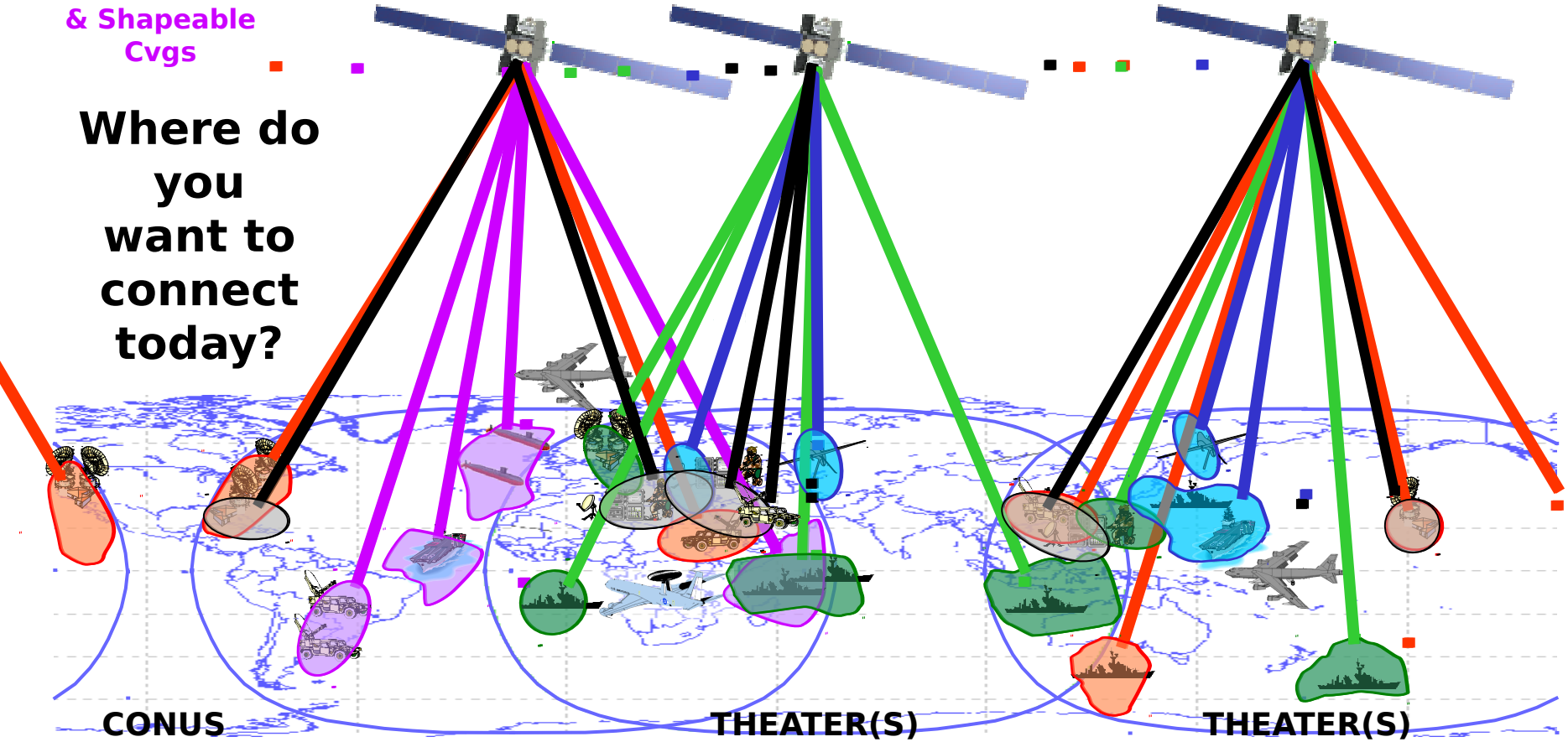
Reachback
Cross-banding

Inter-theater
Spatial Reuse & Steerable Cvgs

Intra-theater
Channelization & Polarization Reuse

Broadcast
High Power & High Gain Cvgs

Where do you want to connect today?



Flexible Bandwidth to the Battlefield

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WGS Support of UAV Communications

- **Today, WGS can provide Ka-band service similar to commercial Ku-band SATCOM**
  - **Assured Access… Dedicated MILSATCOM asset**
  - **Secure Control… DoD Crypto**
  - **Flexible Coverage… Provides for multiple missions**
  - **Free… No commercial lease costs**

Is the GH Ready for WGS Ka Service?

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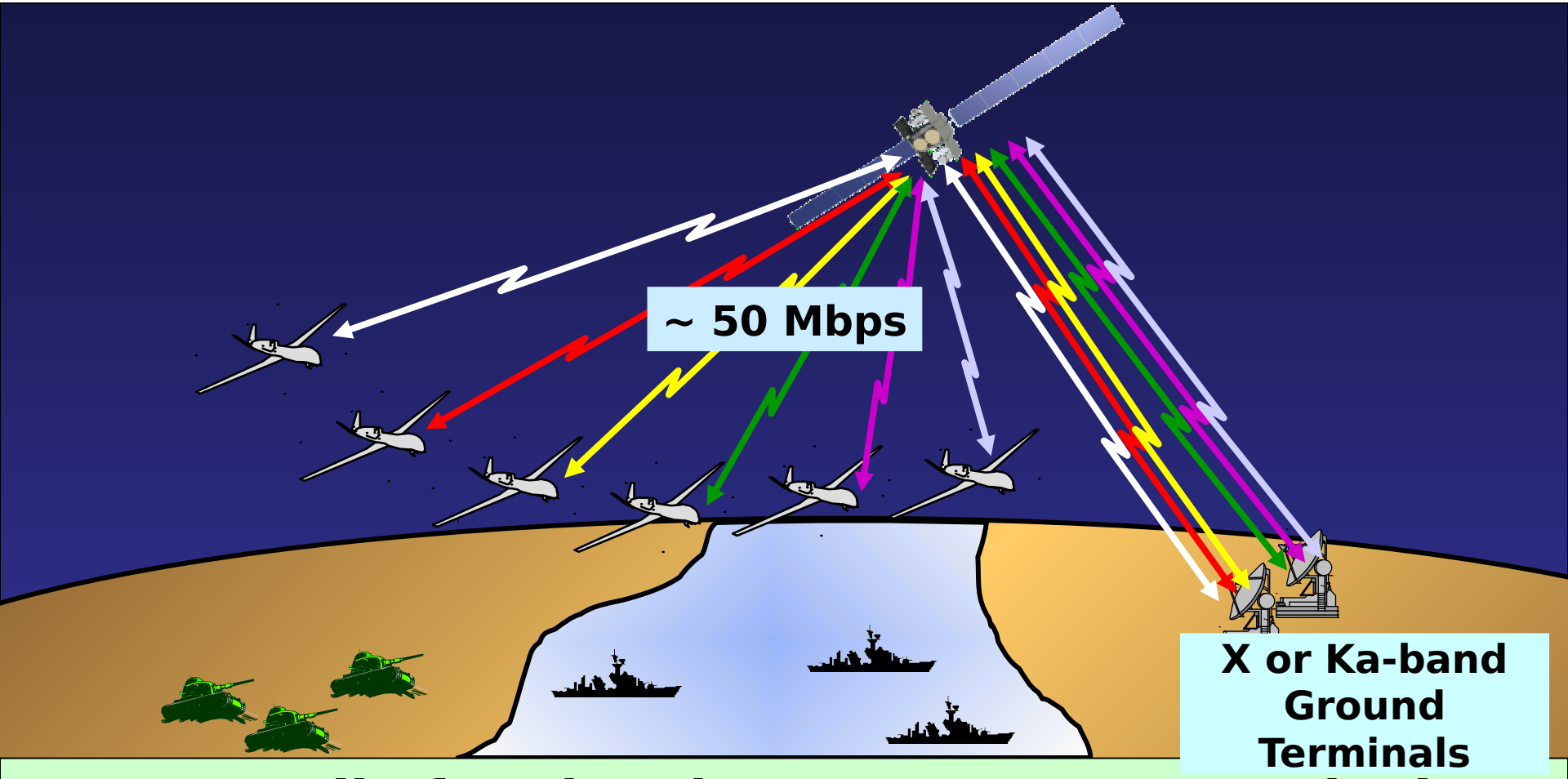
WGS Support in FY05



- Install of Ka-band 30/20 GHz UAV Terminal provides access
- Each WGS can support up to 8 UAVs

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Enhanced WGS Support of UAVs

- Digital channelizer bypass provides 274 Mbps comms
  - Flexibility… Provides for 2 missions per satellite
    - Up to 4 missions in some theaters (coverage overlap)
  - Assured Access… Dedicated MILSATCOM asset
- Proposed in USAF FY04 POM for WGS F4, 5, & 6
  - No Ka-band 274 Mbps service until FY09

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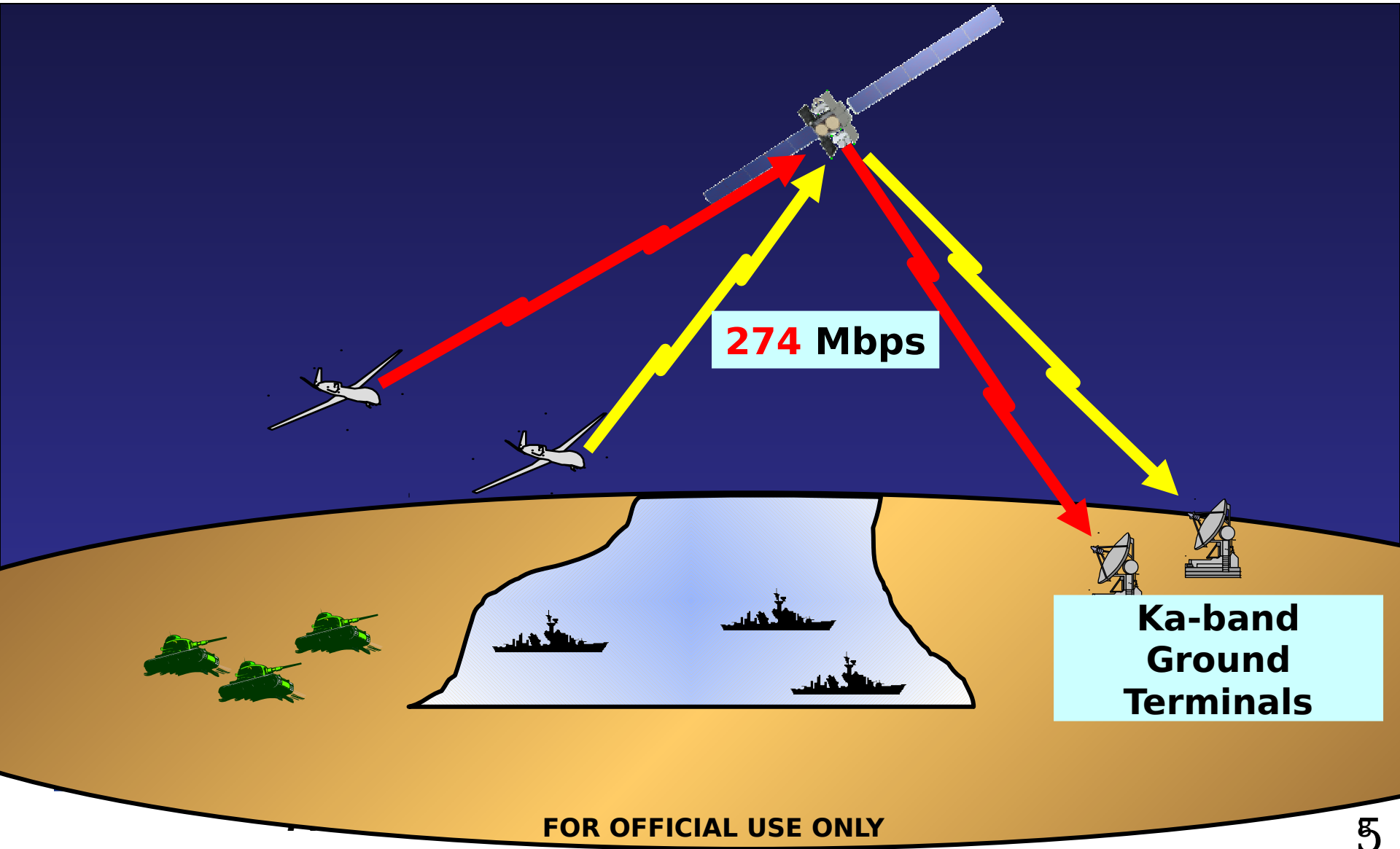
Enhanced WGS UAV Support



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WGS For UAV Summary

- **Today, WGS can provide significant UAV support**
- **IOC in FY 05 – Are your terminals ready?**
- **UAV Bypass Study underway**
- **UAV Community Input Needed Now**